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DNA Damage of *Salicornia herbacea* Extract in HepG2 Exposed to H₂O₂

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In folk medicine, *Salicornia herbacea* has been used to treat a variety of disease such as constipation, obesity, diabetes, asthma, arthritis and cancer. We have used the comet assay to investigate the influence of growth state and DNA repair process on the response of cultured human hepatoma cells to oxidative damage. HepG2 cells were treated with the extract of *Salicornia herbacea* in different concentration for 48h; the proliferation of HepG2 cells were measured by MTT assay. The comet assay was used to measure the DNA damage of HepG2 cells. Extract of *Salicornia herbacea* inhibited the proliferation of HepG2 cells and the growth inhibitory rate of experimental groups were significantly higher than that of control group with very statistical significance; and it could induce the breakage of DNA single strand of HepG2 cells and resulted in comet cells with tail. Rate of DNA tail and the tail length of DNA were increased with the increasing concentration of extract of *Salicornia herbacea*. The results suggested that *Salicornia herbacea* could be used as a candidate supplement to prevent the cancer.

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